

=> FILE REG

FILE 'REGISTRY' ENTERED AT 11:38:30 ON 03 DEC 2008  
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=> DISPLAY HISTORY FULL L1-

FILE 'HCAPLUS' ENTERED AT 10:10:28 ON 03 DEC 2008

L1	3700	SEA DEANGELIS ?/AU OR DE ANGELIS ?/AU OR ANGELIS ?/AU
L2	31	SEA POLLESEL ?/AU
L3	181	SEA BELLUSSI ?/AU
L4	1645	SEA LOCKHART ?/AU
L5	0	SEA L1 AND L2 AND L3 AND L4
L6	0	SEA L2 AND L3 AND L4
L7	0	SEA L3 AND L4
L8	35423	SEA DISPOS?/TI
L9	135174	SEA SULFUR#/TI
L10	91	SEA L8 AND L9
L11	0	SEA L10 AND ((L1 OR L2 OR L3 OR L4))

FILE 'REGISTRY' ENTERED AT 10:56:26 ON 03 DEC 2008

		E SULFUR/CN
L12	1	SEA SULFUR/CN
L13	238	SEA S/ELS AND 1/ELC.SUB
		E HYDROGEN SULFIDE/CN
L14	1	SEA "HYDROGEN SULFIDE"/CN

FILE 'HCA' ENTERED AT 10:59:54 ON 03 DEC 2008

L15	154	SEA L12 (L) DISPOS?
L16	892	SEA L12 (L) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT? OR REMEDIAT? OR SEQUEST? OR STORE# OR STORING# OR STORAG?)
L17	820	SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR S) (2A) DISPOS?
L18	7454	SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR S) (2A) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT? OR REMIAT? OR SEQUEST? OR STORE# OR STORING# OR STORAG?)
L19	13	SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR S) (5A) (CONVERT? OR CONVERS? OR TRANSFORM? OR CHANG?) (5A) ( ?SULFAN? OR ?SULPHAN?)
L20	2781	SEA L12 (L) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR FUSION?)
L21	14422	SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR S) (2A) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR FUSION?)

L22 183 SEA L13 (L) DISPOS?  
 L23 972 SEA L13 (L) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT?  
 OR REMEDIAT? OR SEQUEST? OR STORE# OR STORING# OR  
 STORAG?)  
 L24 3198 SEA L13 (L) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR  
 FUSION?)  
 L25 111282 SEA L14 OR (HYDROGEN# OR H) (W) (SULFIDE# OR SULPHIDE#) OR  
 H2S  
 L26 42010 SEA ?SULFAN? OR ?SULPHAN?  
 L27 1228 SEA ?SULFANE? OR ?SULPHANE?  
 L28 2 SEA (L15 OR L17 OR L22) AND L26  
 L29 0 SEA (L15 OR L17 OR L22) AND L27  
 L30 12 SEA (L16 OR L18 OR L23) AND L26  
 L31 6 SEA (L16 OR L18 OR L23) AND L27  
 L32 23 SEA (L20 OR L21 OR L24) AND L26  
 L33 6 SEA (L20 OR L21 OR L24) AND L27  
 L34 2 SEA L32 AND L25  
 L35 180564 SEA L12 OR L13  
 L36 104 SEA L35 AND L25 AND L26  
 L37 76 SEA L35 AND L25 AND L27  
 L38 7 SEA L36 AND ((L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR  
 L21 OR L22 OR L23 OR L24))

FILE 'REGISTRY' ENTERED AT 11:23:31 ON 03 DEC 2008

E CHLORINE/CN  
 L39 1 SEA CHLORINE/CN  
 L40 218 SEA (H (L) S)/ELS (L) 2/ELC.SUB  
 L41 136 SEA L40 AND 1<S  
 L42 119 SEA L41 NOT (D OR T)/ELS

FILE 'HCA' ENTERED AT 11:26:00 ON 03 DEC 2008

L43 120277 SEA L39 OR CL2 OR (CHLORINE# OR CL) (2A) (GAS## OR  
 GASEOUS? OR GASIF? OR ATM# OR ATMOS?)  
 L44 669 SEA L42 OR H2SN+1  
 L45 345 SEA L35 AND L43 AND L25  
 L46 9 SEA L45 AND L44  
 L47 6 SEA L45 AND L26  
 L48 3 SEA L45 AND L27

FILE 'REGISTRY' ENTERED AT 11:28:04 ON 03 DEC 2008

E SULFUR DICHLORIDE/CN  
 L49 1 SEA "SULFUR DICHLORIDE"/CN  
 E HYDROGEN CHLORIDE/CN  
 L50 1 SEA "HYDROGEN CHLORIDE"/CN

FILE 'HCA' ENTERED AT 11:29:43 ON 03 DEC 2008

L51 2757 SEA L49 OR SCL2 OR CL2S

L52 668673 SEA L50 OR HCL OR (HYDROGEN# OR H)(W)(CHLORIDE# OR  
 MONOCHLORIDE#) OR (HYDROCHLORIC# OR MURIATIC?)(2A)ACID#  
 L53 12 SEA L45 AND L51  
 L54 157 SEA L45 AND L52  
 L55 5 SEA L53 AND L54  
 L56 6882 SEA (PRODUC? OR PROD# OR GENERAT? OR MANUF? OR MFR# OR  
 CREAT? OR FORM## OR FORMING# OR FORMAT? OR MAKE# OR  
 MADE# OR MAKING# OR FABRICAT? OR SYNTHESI? OR PREPAR? OR  
 PREP#)(2A)(?SULFAN? OR ?SULPHAN?)  
 L57 24 SEA L36 AND L56  
 L58 22 SEA L37 AND L56  
 L59 54 SEA L19 OR L28 OR L30 OR L31 OR L33 OR L34 OR L38 OR L46  
 OR L47 OR L48 OR L53 OR L55  
 L60 44 SEA L19 OR L28 OR L31 OR L33 OR L34 OR L38 OR L46 OR L47  
 OR L48 OR L55  
 L61 10 SEA (L30 OR L53) NOT L60  
 L62 20 SEA (L57 OR L58) NOT (L60 OR L61)  
 L63 72 SEA (L36 OR L37) NOT (L60 OR L61 OR L62)  
 L64 37 SEA 1808-2003/PY,PRY,AY AND L60  
 L65 10 SEA 1808-2003/PY,PRY,AY AND L61  
 L66 20 SEA 1808-2003/PY,PRY,AY AND L62  
 L67 67 SEA 1808-2003/PY,PRY,AY AND L63  
 L68 2734 S CLAUS  
 L69 1626 S L68 AND L35  
 L70 4 S L69 AND (L44 OR L26)  
 L71 1247 S L69 AND L25  
 L72 0 S L71 AND L51  
 L73 10 S L71 AND L52  
 L74 1 S L71 AND L43  
 L75 13 S (L70 OR L73 OR L74) NOT (L64 OR L65 OR L66 OR L67)  
 L76 12 S 1808-2003/PY,PRY,AY AND L75  
 L77 4202 S (L12 OR L13) (L) WAST?  
 L78 9159 S WAST?(2A)(SULFUR# OR SULFER# OR SULPHUR# OR SULPHER# OR  
 L79 22 S (L77 OR L78) AND L26  
 L80 5 S (L77 OR L78) AND (L27 OR L44)  
 L81 21 S (L79 OR L80) NOT (L76 OR L64-L67)  
 L82 18 S 1808-2003/PY,PRY,AY AND L81

=> FILE HCA

FILE 'HCA' ENTERED AT 11:39:41 ON 03 DEC 2008

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=> D L64 1-37 TI

L64 ANSWER 1 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Methods and compositions for increasing the efficacy of biologically-active ingredients such as antitumor agents

L64 ANSWER 2 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Role of organic mediators in conversion of hydrogen sulfide and sulfanes to elemental sulfur

L64 ANSWER 3 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Procedure for the conversion of polysulfane in hydrogen sulfide and sulfur in gas flows resulting in hydrogen sulfide synthesis

L64 ANSWER 4 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Production of polymeric sulfur using a cross-linking agent

L64 ANSWER 5 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Determining priority hazardous substances related to hazardous waste sites

L64 ANSWER 6 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Fluorinated ketene dithioacetals. 8.  
1,1-Bis(ethylsulfanyl)perfluorobut-1-ene as starting material for the synthesis of substituted 2-(trifluoromethyl)furans and -pyrroles

L64 ANSWER 7 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Stereospecific synthesis and hydrolysis of optically active diaryl(acylamino)(acyloxy)spiro- $\lambda$ 4-sulfanes and related cyclic diaryl(acylamino)sulfonium salts

L64 ANSWER 8 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Rhodanese activity and total sulfur content in frog and mouse liver

L64 ANSWER 9 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Thermodynamic aspects of energy conservation by chemolithotrophic sulfur bacteria in relation to the sulfur oxidation pathways

L64 ANSWER 10 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Determining priority hazardous substances related to hazardous waste sites

L64 ANSWER 11 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Photoionization spectra and ionization energies of HSCl, HSSSH,

SSCl, and HSSCl formed in the reaction system Cl/Cl<sub>2</sub>/  
H<sub>2</sub>S

- L64 ANSWER 12 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI "Oyster watch": monitoring trace metal and organochlorine concentrations in Sydney's coastal waters
- L64 ANSWER 13 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI RI-MP2. First derivatives and global consistency
- L64 ANSWER 14 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Copolymerization of elemental sulfur with cyclic(arylene disulfide) oligomers
- L64 ANSWER 15 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Oxidative metabolism of inorganic sulfur compounds by bacteria
- L64 ANSWER 16 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI A new method for the synthesis of two-equivalent couplers in color photography
- L64 ANSWER 17 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Stereocontrolled synthesis of E-homoallylic sulfides with 1,4,5 related chiral centers using the [2,3] sigmatropic rearrangement of sulfonium ylides
- L64 ANSWER 18 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Geochemical implications of subaqueous molten sulfur at Yugama Crater Lake, Kusatsu-Shirane Volcano, Japan
- L64 ANSWER 19 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Land disposal restrictions for third third schedule wastes
- L64 ANSWER 20 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Heat capacity, melting enthalpies, and melting temperatures of pure liquid inorganic compounds
- L64 ANSWER 21 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Electron correlations in molecules. III. Strength of electron correlations in localized and aromatic bonds or main-group atoms
- L64 ANSWER 22 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Equilibrium analysis of combustion/incineration
- L64 ANSWER 23 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI  $\gamma$ -Radiolysis of dialkyl, alkyl-aryl and diaryl sulfones. A volatile product study

L64 ANSWER 24 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Reagent hazards

L64 ANSWER 25 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Formation and decomposition of thiosulfate in the ferrous sulfide-sulfur dioxide reaction

L64 ANSWER 26 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Dangerous chemicals reactions. 39. Inorganic oxides

L64 ANSWER 27 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of sulfur in organic compounds by fusion with aluminum powder

L64 ANSWER 28 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI General pseudopotential model for molecules with many valence electrons

L64 ANSWER 29 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Condensation of 1,3-hexasulfur diimide with chlorosulfanes as a route to fused-ring sulfur nitrides

L64 ANSWER 30 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Influence of fungicides on the quality and storageability of apples

L64 ANSWER 31 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Additive function of entropy of boiling, and the prediction of latent heat of vaporization and vapor pressure of liquids

L64 ANSWER 32 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Chemistry of sulfur. XLI. The reaction of hydrogen sulfide with chlorosulfanes, chlorine, or bromine (synthesis of lower sulfanes)

L64 ANSWER 33 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Chemistry of sulfur. XXIII. Preparation of higher bromosulfanes

L64 ANSWER 34 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Reductone. III. The elucidation of the structure of 5-aryl-3-hydroxytetronimides

L64 ANSWER 35 OF 37 HCA COPYRIGHT 2008 ACS on STN  
TI Raney metals as desulfurization catalysts. I

L64 ANSWER 36 OF 37 HCA COPYRIGHT 2008 ACS on STN

TI Isomerism of the diazosulphanilic acids and diazo-ethers

L64 ANSWER 37 OF 37 HCA COPYRIGHT 2008 ACS on STN

TI Note on the interaction of bismuth haloid compounds and  
hydrogen sulphide

=> D L64 2,3,10,18,19 BIB ABS HITSTR HITIND

L64 ANSWER 2 OF 37 HCA COPYRIGHT 2008 ACS on STN

AN 142:137629 HCA Full-text

TI Role of organic mediators in conversion of hydrogen  
sulfide and sulfanes to elemental sulfur

AU Berberova, N. T.; Fomenko, A. I.; Shinkar, E. V.; Osipova, V. P.;  
Monyashin, A. O.; Zin'kov, F. E.

CS Astrakhan. Gos. Tekh. Univ., Astrakhan., Russia

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya  
Tekhnologiya (2003), 46(6), 74-78  
CODEN: IVUKAR; ISSN: 0579-2991

PB Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet

DT Journal

LA Russian

AB It was shown that polysulfanes contained in sulfur are prone to  
single-electron, irreversible oxidn. in non-aq. media. Radical  
cations of sulfanes are fragmented with proton elimination.  
Electrochem. and chem. oxidn. of higher sulfanes to elemental sulfur  
involves stages of formation of lower polysulfanes. As mediators in  
transformation of hydrogen sulfide and sulfanes into sulfur, various  
org. single-electron oxidants were used. Sterically hindered o-  
benzoquinones and o-semiquinondiamine platinum and palladium  
complexes were used as catalysts of sulfur degasification process.

IT 7704-34-9F, Sulfur, preparation  
(conversion of hydrogen sulfide and  
sulfanes to)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

IT 7783-06-4, Hydrogen sulfide, reactions  
(conversion of hydrogen sulfide and  
sulfanes to elemental sulfur)

RN 7783-06-4 HCA

CN Hydrogen sulfide (H2S) (CA INDEX NAME)

H<sub>2</sub>S

CC 49-1 (Industrial Inorganic Chemicals)  
Section cross-reference(s): 72  
ST Claus process sulfur purifn hydrogen sulfide  
sulfane removal  
IT Cyclic voltammetry  
Oxidation  
Oxidation, electrochemical  
(conversion of hydrogen sulfide and  
sulfanes to elemental sulfur)  
IT Decomposition  
(of polysulfanes; conversion of hydrogen  
sulfide and sulfanes to elemental sulfur)  
IT 7704-34-9F, Sulfur, preparation  
(conversion of hydrogen sulfide and  
sulfanes to)  
IT 7783-06-4, Hydrogen sulfide, reactions  
37331-50-3, Sulfane  
(conversion of hydrogen sulfide and  
sulfanes to elemental sulfur)  
IT 3383-21-9 34105-76-5 37780-09-9 329783-64-4 590418-61-4  
(in sulfur purifn.; conversion of  
hydrogen sulfide and sulfanes to  
elemental sulfur)

L64 ANSWER 3 OF 37 HCA COPYRIGHT 2008 ACS on STN  
AN 140:273048 HCA Full-text  
TI Procedure for the conversion of polysulfane in  
hydrogen sulfide and sulfur in gas flows resulting  
in hydrogen sulfide synthesis  
IN Moeller, Alexander; Boeck, Wolfgang; Taugner, Wolfgang; Heinzel,  
Harald; Rautenberg, Stephan  
PA Degussa A.-G., Germany  
SO Ger. Offen., 2 pp.  
CODEN: GWXXBX

DT Patent  
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 10245164	A1	20040408	DE 2002-10245164	



200209  
26

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WO 2004028963

A1

20040408

WO 2003-EP9432

200308  
26

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

AU 2003255483

A1

20040419

AU 2003-255483

200308  
26

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EP 1542925

A1

20050622

EP 2003-798130

200308  
26

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
SK

BR 2003014663

A

20050802

BR 2003-14663

200308  
26

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CN 1684905

A

20051019

CN 2003-823024

200308  
26

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CN 1292980

C

20070103

JP 2006500309

T

20060105

JP 2004-538838

200308  
26

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RU 2323874

C2

20080510

RU 2005-112707

200308  
26

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US 20050265913      A1      20051201      US 2005-529148

200503  
24

US 7326393      B2      20080205  
US 20080175778      A1      20080724      US 2007-976717

200710  
26

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PRAI DE 2002-10245164      A      20020926      <--  
WO 2003-EP9432      W      20030826      <--  
US 2005-529148      A2      20050324

AB      Polysulfane (H<sub>2</sub>S<sub>x</sub>) resulting in hydrogen sulfide synthesis are catalytically converted by contacting with e.g. activated carbon, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, or zeolites to give H<sub>2</sub>S and S.

IT      7704-34-9F, Sulfur, preparation 7783-06-4F  
    , Hydrogen sulfide, preparation  
    (procedure for conversion of polysulfane in  
    hydrogen sulfide and sulfur in gas flows  
    resulting in hydrogen sulfide synthesis)

RN      7704-34-9      HCA  
CN      Sulfur      (CA INDEX NAME)

S

RN      7783-06-4      HCA  
CN      Hydrogen sulfide (H<sub>2</sub>S)      (CA INDEX NAME)

H<sub>2</sub>S

IC      ICM B01D053-48  
ICS B01D053-86  
CC      49-2 (Industrial Inorganic Chemicals)  
ST      polysulfane catalytic conversion; hydrogen  
    sulfide manuf; sulfur manuf  
IT      Zeolites (synthetic), processes  
    (for conversion of polysulfane in hydrogen  
    sulfide and sulfur in gas flows resulting in  
    hydrogen sulfide synthesis)  
IT      7440-44-0, Carbon, processes  
    (activated; for conversion of polysulfane in

hydrogen sulfide and sulfur in gas flows  
resulting in hydrogen sulfide synthesis)

IT 1344-28-1, Alumina, processes 7631-86-9, Silica, processes  
(for conversion of polysulfane in hydrogen  
sulfide and sulfur in gas flows resulting in  
hydrogen sulfide synthesis)

IT 7704-34-9P, Sulfur, preparation 7783-06-4P  
, Hydrogen sulfide, preparation  
(procedure for conversion of polysulfane in  
hydrogen sulfide and sulfur in gas flows  
resulting in hydrogen sulfide synthesis)

IT 37331-50-3, Sulfane  
(procedure for conversion of polysulfane in  
hydrogen sulfide and sulfur in gas flows  
resulting in hydrogen sulfide synthesis)

L64 ANSWER 10 OF 37 HCA COPYRIGHT 2008 ACS on STN

AN 129:241066 HCA Full-text

OREF 129:48971a,48974a

TI Determining priority hazardous substances related to hazardous waste  
sites

AU Roney, Nickolette; Henriques, William D.; Fay, Mike; Holler, James  
S.; Susten, Sandra S.

CS Public Health Service, Agency for Toxic Substances and Disease  
Registry, U.S. Department of Health and Human Services, Atlanta, GA,  
30333, USA

SO Toxicology and Industrial Health (1998), 14(4), 521-532  
CODEN: TIHEEC; ISSN: 0748-2337

PB Princeton Scientific Publishing Co., Inc.

DT Journal

LA English

AB Hazardous substances on the Comprehensive Environmental Response,  
Compensation, and Liability Act were ranked.

IT 7782-50-5, Chlorine, biological studies 7783-06-4,  
Hydrogen sulfide, biological studies  
15117-53-0, Sulfur-35, biological studies  
(detg. priority hazardous substances related to hazardous waste  
sites)

RN 7782-50-5 HCA

CN Chlorine (CA INDEX NAME)

C1-C1

RN 7783-06-4 HCA

CN Hydrogen sulfide (H2S) (CA INDEX NAME)

H2S

RN 15117-53-0 HCA

CN Sulfur, isotope of mass 35 (CA INDEX NAME)

35s

CC 4-4 (Toxicology)

Section cross-reference(s): 8

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 18 OF 37 HCA COPYRIGHT 2008 ACS on STN

AN 122:60377 HCA Full-text

OREF 122:11559a,11562a

TI Geochemical implications of subaqueous molten  
sulfur at Yugama Crater Lake, Kusatsu-Shirane Volcano, Japan

AU Takano, Bokuichiro; Saitoh, Hiroko; Takano, Etsu

CS Dep. Chem., Univ. Tokyo, Tokyo, 153, Japan

SO Geochemical Journal (1994), 28(3), 199-216

CODEN: GEJOBE; ISSN: 0016-7002

DT Journal

LA English

AB Crater lakes with active subaq. fumaroles often contain molten sulfur pools on the lake floor. Volcanic gases passing through the sulfur pools carry hollow spherules of solidified molten sulfur to the surface of crater lakes. This sulfur dissolves SO2 and H2S gases and releases these gases into the water. The sulfur also contains homocyclic sulfur (cycl. S<sub>x</sub>, x = 6-16) and probably sulfane monosulfonates. The concn. of cyclic S<sub>7</sub> increases with increasing temp. between 120 and 175°, which is useful to est. the temps. of subaq. molten sulfur pools. The gases drastically lower viscosity of the molten sulfur. This may be due to blockage of growing long-chain sulfur mols. by the dissolved gases. Thus a jump in viscosity at 159° obsd. for pure sulfur is not likely to be present in subaq. molten sulfur at crater lakes. Based on the chem. and morphol. of sulfur slicks, activity of subaq. fumaroles can be divided into four stages (I-IV), each of which may serve for qual. in situ monitoring of crater lakes. At Stage I, no molten sulfur pools exist on the

lake floor and fumaroles discharge low temp. gases (<119°) contg. only traces of SO<sub>2</sub>; at Stage II, subaq. molten sulfur pools (119° < T < 150°) are formed, releasing yellow hollow spherules of sulfur with no tails; at Stage III, the fumarolic temp. increases to >150°, resulting in an increase in molten sulfur viscosity; and at Stage IV, frequent phreatic or geyser-like eruptions are obsd. The molten sulfur pools are dispersed into pieces on the lake floor at this stage.

IT 10544-50-0, Sulfur, mol. (S8), occurrence 21459-04-1  
 , Cycloheptasulfur, occurrence  
 (in molten sulfur in waters as indication of  
 fumarolic activity at bottom of Yugama Crater Lake,  
 Kusatsu-Shirane Volcano, Japan)  
 RN 10544-50-0 HCA  
 CN Sulfur, mol. (S8) (CA INDEX NAME)



RN 21459-04-1 HCA  
 CN Sulfur, mol. (S7) (CA INDEX NAME)



IT 7704-34-9, Sulfur, occurrence  
 (subaq. molten; in waters as indication of fumarolic  
 activity at bottom of Yugama Crater Lake, Kusatsu-Shirane  
 Volcano, Japan)  
 RN 7704-34-9 HCA  
 CN Sulfur (CA INDEX NAME)

CC 53-3 (Mineralogical and Geological Chemistry)  
 ST sulfur subaq molten Yugama Crater Lake  
 IT Fumaroles  
     (subaq. molten sulfur in waters as indication  
     of fumarolic activity at bottom of Yugama Crater Lake,  
     Kusatsu-Shirane Volcano, Japan)

IT Waters, natural  
     (lake, caldera, subaq. molten sulfur in  
     waters as indication of fumarolic activity at bottom of Yugama  
     Crater Lake, Kusatsu-Shirane Volcano, Japan)

IT 10544-50-0, Sulfur, mol. (S8), occurrence 21459-04-1  
     , Cycloheptasulfur, occurrence  
     (in molten sulfur in waters as indication of  
     fumarolic activity at bottom of Yugama Crater Lake,  
     Kusatsu-Shirane Volcano, Japan)

IT 7704-34-9, Sulfur, occurrence  
     (subaq. molten; in waters as indication of fumarolic  
     activity at bottom of Yugama Crater Lake, Kusatsu-Shirane  
     Volcano, Japan)

L64 ANSWER 19 OF 37 HCA COPYRIGHT 2008 ACS on STN  
 AN 114:234441 HCA Full-text  
 OREF 114:39439a,39442a  
 TI Land disposal restrictions for third third schedule wastes  
 CS United States Environmental Protection Agency, Washington, DC,  
     20460, USA  
 SO Federal Register (1991), 56(21), 3864-928, 31 Jan 1991  
     CODEN: FEREAC; ISSN: 0097-6326  
 DT Journal  
 LA English  
 AB Regulations on prohibition of land disposal of certain hazardous  
     wastes are amended under the Federal Resource Conservation and  
     Recovery Act. These amendments include: treatment stds. for certain  
     solvent wastes, clarification of the term multisource leachate,  
     regulations for small quantity generators, the definition of inorg.  
     solid debris, application of the Toxicity Characteristic Leaching  
     Procedure and the Extn. Procedure in detg. land disposal  
     restrictions, addn. of acid leaching-chem. pptn. and thermal recovery  
     of metals to the list of technologies for waste treatment, tables of  
     regulated hazardous constituent concns. in wastewaters and  
     nonwastewaters, technol.-based stds. by waste code, and effective  
     dates of regulation for the specific wastes.

IT 7783-06-4, Hydrogen sulfide, uses and  
     miscellaneous 18496-25-8, Sulfide  
     (hazardous wastes contg., land disposal of, stds. for)

RN 7783-06-4 HCA  
 CN Hydrogen sulfide (H2S) (CA INDEX NAME)

H2S

RN 18496-25-8 HCA  
CN Sulfide (CA INDEX NAME)

s2-

IT 7782-50-5P, Chlorine, uses and miscellaneous  
(wastes from mercury cell prodn. of, land disposal of, stds. for)  
RN 7782-50-5 HCA  
CN Chlorine (CA INDEX NAME)

Cl-Cl

CC 60-5 (Waste Treatment and Disposal)

=> D L65 1-10 TI

L65 ANSWER 1 OF 10 HCA COPYRIGHT 2008 ACS on STN  
TI Alternatives for processing metal sulfides without SOx emissions

L65 ANSWER 2 OF 10 HCA COPYRIGHT 2008 ACS on STN  
TI The preparation of chalcogenide glasses in **chlorine**  
reactive **atmosphere**

L65 ANSWER 3 OF 10 HCA COPYRIGHT 2008 ACS on STN  
TI Effect of pesticides on most probable number of soil microbes from  
tea (Camellia sinensis) plantations and uncultivated land enumerated  
in enrichment media

L65 ANSWER 4 OF 10 HCA COPYRIGHT 2008 ACS on STN  
TI Process for preparing sulphur tetrafluoride by reduction of a  
uranium fluoride

L65 ANSWER 5 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Synthesis and properties of silica with chemically fixed sulfur-containing organic compounds

L65 ANSWER 6 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Persistence and residues of carbofuran, disulfoton and endosulfan used for the control of major pests of sorghum crop

L65 ANSWER 7 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Reactions of active nitrogen with sulfur compounds

L65 ANSWER 8 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Fixative for keratin fibers

L65 ANSWER 9 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Studies on the effect of BZ 55 and D 860 on the pancreatic islet cells of rat

L65 ANSWER 10 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Compounds of alummium, chlorine and sulfur

=> D L66 1-20 TI

L66 ANSWER 1 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Removal of polysulfanes from hydrogen sulfide streams

L66 ANSWER 2 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI The sulfane sulfur of persulfides is the actual substrate of the sulfur-oxidizing enzymes from Acidithiobacillus and Acidiphilium spp.

L66 ANSWER 3 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Product class 7: 1,2-dithiolium salts and related compounds

L66 ANSWER 4 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI A Chemical Equilibrium Equation of State Model for Elemental Sulfur and Sulfur-Containing Fluids

L66 ANSWER 5 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI An Experimental Study on the Kinetics of the Formation and Decomposition of Sulfanes in the Sulfur/H<sub>2</sub>S System

L66 ANSWER 6 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Oxidation of hydrogen sulfide by a methanol



solution of sulfur dioxide and production of  
cyclooctasulfane

- L66 ANSWER 7 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Ab initio study of hypervalent sulfur hydrides as model intermediates in the interconversion reactions of compounds containing sulfur-sulfur bonds
- L66 ANSWER 8 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Novel symmetrical and mixed carbamoyl and aminopolysulfanes by reactions of (alkoxydichloromethyl)polysulfanyl substrates with N-methylaniline
- L66 ANSWER 9 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfurization of azines. Part VI. Sulfurization of Py-quinolyl sulfides
- L66 ANSWER 10 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Separation of dihydrogen polysulfides (polysulfanes) using reversed-phase HPLC
- L66 ANSWER 11 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfur in aqueous solution
- L66 ANSWER 12 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Liquid hydrogen sulfide in contact with sulfur
- L66 ANSWER 13 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI The chemistry of sulfur. LII. Thiocyanogen trichloride and some of its derivatives
- L66 ANSWER 14 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Acids of sulfur. XII. On the problem of Wackenroder's solution
- L66 ANSWER 15 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Addition of hydrogen sulfide to the nitrile group of arylsulfonylcyanamides by means of thiosulfuric acid
- L66 ANSWER 16 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Chemistry of sulfur. XL. Thermochemistry of the sulfanes: enthalpies of formation and bond energies
- L66 ANSWER 17 OF 20 HCA COPYRIGHT 2008 ACS on STN  
TI Chemistry of sulfur. XXX. Preparation of the sulfanes, H<sub>2</sub>S<sub>2</sub>, H<sub>2</sub>S<sub>3</sub>, H<sub>2</sub>S<sub>4</sub>, and H<sub>2</sub>S<sub>5</sub>
- L66 ANSWER 18 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI The chemistry of sulfur. XXXII. Kinetic investigation of the thermal decomposition of **disulfane** H2S2

L66 ANSWER 19 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI The chemistry of sulfur. XXIX. The **preparation** of crude **sulfanes**

L66 ANSWER 20 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Chemistry of sulfur. XIX. Electrochemical **preparation** of **sulfanes**, H2Sn

=> D L66 1,12,17,19 BIB ABS HITSTR HITIND

L66 ANSWER 1 OF 20 HCA COPYRIGHT 2008 ACS on STN

AN 149:156324 HCA Full-text

TI Removal of **polysulfanes** from **hydrogen sulfide** streams

IN Moller, Alexander; Bock, Wolfgang; Taugner, Wolfgang; Heinzel, Harald; Rautenberg, Stephan

PA Evonik Degussa G.M.B.H., Germany

SO U.S. Pat. Appl. Publ., 4pp., Cont.-in-part of U.S. Ser. No. 529,148. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	US 20080175778	A1	20080724	US 2007-976717	200710 26
				<--	
	DE 10245164	A1	20040408	DE 2002-10245164	200209 26
				<--	
	WO 2004028963	A1	20040408	WO 2003-EP9432	200308 26
				<--	

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,

SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
 ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
 NE, SN, TD, TG  
 US 20050265913 A1 20051201 US 2005-529148

200503  
 24

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US 7326393 B2 20080205  
 PRAI DE 2002-10245164 A 20020926 <--  
 WO 2003-EP9432 W 20030826 <--  
 US 2005-529148 A2 20050324  
 AB Polysulfanes are removed from crude gas formed during the prodn. of  
 hydrogen sulfide from sulfur and hydrogen by passing the crude gas  
 through a wash system where it is brought into contact with a wash  
 soln. of water or methanol; and collecting the purified gas from the  
 wash soln. The washing soln. can contain 0.5-20 wt.% of an alkali or  
 alk. earth hydroxide or oxide, org. amine, amino alc., or ammonia.  
 The wash system is a jet washer. The process further includes a  
 second wash step in which the purified gas is passed through a  
 countercurrent washer contg. an aq. or methanolic soln. The purified  
 gas may also be further treated by adsorption.  
 IT 7783-06-4F, Hydrogen sulfide (  
 H2S), preparation  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 RN 7783-06-4 HCA  
 CN Hydrogen sulfide (H2S) (CA INDEX NAME)

H2S

IT 7704-34-9, Sulfur, reactions  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 RN 7704-34-9 HCA  
 CN Sulfur (CA INDEX NAME)

S

INCL 423242400; 423243010; 423243080; 423243060  
 CC 49-8 (Industrial Inorganic Chemicals)  
 Section cross-reference(s): 48  
 ST polysulfane removal hydrogen sulfide  
 purifn jet washing adsorption  
 IT Alcohols, processes  
 (amino, washing fluid contg.; removal of polysulfanes  
 from hydrogen sulfide streams)  
 IT Adsorption  
 Adsorption apparatus  
 Scrubbers  
 Wet scrubbing  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 IT Alkali metal hydroxides  
 Alkaline earth hydroxides  
 Amines, processes  
 (washing fluid contg.; removal of polysulfanes from  
 hydrogen sulfide streams)  
 IT 7440-44-0, Carbon, uses  
 (activated, adsorbent; removal of polysulfanes from  
 hydrogen sulfide streams)  
 IT 7783-06-4P, Hydrogen sulfide (H<sub>2</sub>S), preparation  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 IT 1333-74-0, Hydrogen, reactions 7704-34-9, Sulfur,  
 reactions  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 IT 50864-71-6, Hydrogen polysulfide  
 (removal of polysulfanes from hydrogen  
 sulfide streams)  
 IT 102-71-6, Triethanolamine, processes 1310-58-3, Potassium  
 hydroxide, processes 1310-73-2, Sodium hydroxide, processes  
 7664-41-7, Ammonia, processes  
 (washing fluid contg.; removal of polysulfanes from  
 hydrogen sulfide streams)  
 IT 67-56-1, Methanol, uses  
 (washing fluid; removal of polysulfanes from  
 hydrogen sulfide streams)

L66 ANSWER 12 OF 20 HCA COPYRIGHT 2008 ACS on STN  
 AN 72:83443 HCA Full-text  
 OREF 72:15203a,15206a  
 TI Liquid hydrogen sulfide in contact with sulfur

AU Smith, Jerry Joseph; Jensen, Dan; Meyer, Beat  
CS Chem. Dep., Univ. of Washington, Seattle, WA, USA  
SO Journal of Chemical and Engineering Data (1970), 15(1),  
144-6

CODEN: JCEAAX; ISSN: 0021-9568

DT Journal  
LA English

AB S in contact with liq.  $H_2S$  at equil. pressure  $10^{-6}$  was studied between  $-81$  and  $120^\circ$ . The soly. of solid S is  $5 + 10^{-6}$  mole of  $S_8$  per g of  $H_2S$  at  $-80^\circ$  and  $5 + 10^{-5}$  at  $80^\circ$ . Over this range, log soly. vs.  $1/T$  gives a straight line. From a least squares anal. of the data,  $\Delta H_S = 2.1 \pm 0.1$  kcal/mole. From  $80$  to  $-80^\circ$ , the soly. can be represented by  $\log S = (-4.52 + 102/T) - 3.00$ . In contact with liq.  $H_2S$ , S m.  $98^\circ$ , below the crit. point of  $H_2S$ . The m.p. depression of S is about  $20^\circ$ , indicating that  $H_2S$  dissolves appreciably in solid S. NMR spectra show that no detectable chem. reaction occurs up to  $120^\circ$ . Photolysis yields a white, finely powd. ppt., probably photosulfur, which redissolves or converts to orthorhombic S within 4 weeks after irradiation; no sulfanes are formed. Slow reaction occurs between liq. S and gaseous  $H_2S$  above  $150^\circ$ .

IT 7783-06-4, properties

(soly. in, of sulfur)

RN 7783-06-4 HCA

CN Hydrogen sulfide ( $H_2S$ ) (CA INDEX NAME)

$H_2S$

IT 7704-34-9, properties

(soly. of, in liq. hydrogen sulfide)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

CC 68 (Phase Equilibriums, Chemical Equilibriums, and Solutions)

ST hydrogen sulfide S system; sulfur H  
sulfide system

IT Photolysis

(of sulfur, in contact with liq. hydrogen  
sulfide)

IT Heat of solution

(of sulfur, in hydrogen sulfide)  
IT 7783-06-4, properties  
(soly. in, of sulfur)  
IT 7704-34-9, properties  
(soly. of, in liq. hydrogen sulfide)

L66 ANSWER 17 OF 20 HCA COPYRIGHT 2008 ACS on STN

AN 51:61453 HCA Full-text

OREF 51:11142e-g

TI Chemistry of sulfur. XXX. Preparation of the  
sulfanes, H2S2, H2S3, H2S4, and H2S5

AU Feher, F.; Laue, W.; Winkhaus, G.

CS Univ. Cologne, Germany

SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1956  
) , 288, 113-22

CODEN: ZAACAB; ISSN: 0044-2313

DT Journal

LA Unavailable

AB cf. C.A. 51, 10204e. The procedure for the prepn. of H2S2, H2S3,  
H2S4, and H2S5 by the cracking of raw **sulfanes** at pressures of 10-15  
mm. Hg is described. The procedures for purification are also  
discussed. The ds. are 1.334, 1.491, 1.582, 1.644 (all  $\pm$   
0.001)g./cc., resp. The kinematic viscosities are 0.00462, 0.00886,  
0.0166, and 0.0336 (all  $\pm$  0.0001) Stokes, resp. The dynamic  
viscosities are 0.00616, 0.1321, 0.0263, and 0.0552 (all  $\pm$  0.0001)  
poise, resp. The n20D values are 1.631, 1.729, 1.791, and 1.836 (all  
 $\pm$  0.001), resp. Raman lines are listed.

IT 7704-34-9, Sulfur

(chemistry of)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)

IT Spectra, Raman  
(of sulfane derivs.)

IT Hydrogen sulfides

(prepn. and properties of H2S2, H2S3, H2S4 and H2S5)

IT 7704-34-9, Sulfur

(chemistry of)

L66 ANSWER 19 OF 20 HCA COPYRIGHT 2008 ACS on STN

AN 51:46252 HCA Full-text

OREF 51:8566a-c  
TI The chemistry of sulfur. XXIX. The preparation of crude  
sulfanes  
AU Feher, F.; Laue, W.  
CS Univ. Cologne, Germany  
SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1956  
) , 288, 103-12  
CODEN: ZAACAB; ISSN: 0044-2313  
DT Journal  
LA Unavailable  
AB cf. C.A. 43, 3156f; 44, 965g; 51, 3337g. The procedure for the  
prepn. of crude sulfane mixts. by the addn. of HCl to Na2Sx is  
carried out on a continuous basis. The influence of various factors  
on the yield and on the compn. of the raw oils is considered, with  
the compn. varying from about H2S4.5 to H2S7, depending upon the  
compn. of the H2Sx. Equipment for the production of 2 kg. of raw  
sulfanes per day is described. In one expt., 300 g. S, 1200 g.  
Na2S.9H2O, and 500 ml. H2O are mixed together on a water bath until  
all S is dissolved. The mixt. is cooled to -20° and 1:1 HCl (cooled  
to -10°) is added. After the reaction is complete, the oil is sepd.,  
washed with HCl, and finally dried with P2O5. The yield is 300-350  
g. of raw sulfanes with the compn. H2S5-H2S5.5.  
IT 7704-34-9, Sulfur  
(chemistry of)  
RN 7704-34-9 HCA  
CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)  
IT Hydrogen sulfides  
(prepn. of H2Sx)  
IT 7704-34-9, Sulfur  
(chemistry of)

=> D L67 1-67 TI

L67 ANSWER 1 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Calculation of the visible-UV absorption spectra of hydrogen  
sulfide, bisulfide, polysulfides, and As and Sb sulfides, in  
aqueous solution  
L67 ANSWER 2 OF 67 HCA COPYRIGHT 2008 ACS on STN

- TI Novel species for the sulfur zoo: isomers of S<sub>8</sub>
- L67 ANSWER 3 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Thiosulfoxides (X<sub>2</sub>S=S) and **disulfanes** (XSSX): first observation of organic thiosulfoxides
- L67 ANSWER 4 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Sulfur isotope fractionation during bacterial reduction and disproportionation of thiosulfate and sulfite
- L67 ANSWER 5 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI The behavior of metals and sulfur during the formation of hydrothermal mercury-antimony-arsenic mineralization, Uzon Caldera, Kamchatka, Russia
- L67 ANSWER 6 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Carbon black and its manufacture process and rubber mixtures containing the same
- L67 ANSWER 7 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI How Unstable are Thiosulfoxides? An ab Initio MO Study of Various **Disulfanes** RSSR (R = H, Me, Pr, All), Their Branched Isomers R<sub>2</sub>SS, and the Related Transition States
- L67 ANSWER 8 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Low-temperature addition of hydrogen polysulfides to olefins: formation of 2,2'-dialkyl polysulfides from alk-1-enes and cyclic (poly)sulfides and polymeric organic sulfur compounds from  $\alpha,\omega$ -dienes
- L67 ANSWER 9 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Experimental study of the system water-**hydrogen sulfide**-crystalline sulfur under low-temperature hydrothermal conditions
- L67 ANSWER 10 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Kinetics of isotope exchange reactions involving intra- and intermolecular reactions: I. Rate law for a system with two chemical compounds and three exchangeable atoms
- L67 ANSWER 11 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI The possible role of thiosulfate in the precipitation of sulfur-34-rich barite in some Mississippi Valley-type deposits
- L67 ANSWER 12 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI An ab initio study of the **polysulfane** series **hydrogen sulfide** (H<sub>2</sub>S<sub>2</sub> to H<sub>2</sub>S<sub>6</sub>) and of the sulfur



octamer

- L67 ANSWER 13 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of sulfide in sewage effluents using a new spectrophotometric method
- L67 ANSWER 14 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Application of secondary ion mass spectrometry (SIMS) to the study of sulfur crosslinks in isoprene rubber, natural rubber, and SBR vulcanizates
- L67 ANSWER 15 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Chalcogen metallocene compounds. Reaction of zirconocene and hafnocene dihydrides with sulfur, selenium, and tellurium
- L67 ANSWER 16 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Cadmium polysulfide complexes,  $[Cd(S_x)(S_y)]_2^-$ : syntheses, crystal and molecular structures, and cadmium-113 NMR studies
- L67 ANSWER 17 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Novel synthetic routes to disulfur and disulfur monoxide ligands: nucleophilic attack at coordinated imino-oxo- $\lambda^4$ -sulfanes
- L67 ANSWER 18 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Mineral composition and geochemistry of rocks with bacterial overgrowths from submarine hydrothermal deposits
- L67 ANSWER 19 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Investigations on microbial sulfur respiration. 1. Activation and reduction of elemental sulfur in several strains of eubacteria
- L67 ANSWER 20 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfur isotope exchange reactions in the aqueous system: thiosulfate-sulfide-sulfate at hydrothermal temperature
- L67 ANSWER 21 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Bond dissociation energies in sulfanes: an ab initio study
- L67 ANSWER 22 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Composition of crude sulfane oil, identification of the sulfanes H2S9 to H2S35
- L67 ANSWER 23 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Semimicro methods for analysis of labile sulfide and of labile sulfide plus sulfane sulfur in unusually stable

iron-sulfur proteins

- L67 ANSWER 24 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Organometallic sulfur complexes. 1. Syntheses, structures, and characterizations of organoiron **sulfane** complexes ( $\mu$ -S<sub>x</sub>) [( $\eta$ 5-C5H5)Fe(CO)2]2 (x = 1-4)
- L67 ANSWER 25 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Origin of the labile sulfide in the iron-sulfur proteins of *Escherichia coli*
- L67 ANSWER 26 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI The biosynthetic origin of the sulfur atoms in lipoic acid
- L67 ANSWER 27 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Stable isotope fractionation by *Clostridium pasteurianum*. 4. Sulfur isotope fractionation during enzymatic trithionate, thiosulfate and sulfite reductions
- L67 ANSWER 28 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Ab initio Hartree-Fock-Slater calculations of **polysulfanes** H2Sn (n = 1-4) and the ions HS<sup>n-</sup> and Sn<sup>2-</sup>
- L67 ANSWER 29 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI On the possible roles of gaseous sulfur and **sulfanes** in the atmosphere of Venus
- L67 ANSWER 30 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfur isotope fractionation by *Salmonella heidelberg*: inverse isotope effects during growth on high concentrations of sodium sulfite
- L67 ANSWER 31 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Thiosulfate formation and associated isotope effects during sulfite reduction by *Clostridium pasteurianum*
- L67 ANSWER 32 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Chemistry of phosphorus. 59. Synthesis and structure of 1,2,4-triphenylcyclo-3,5-dithia-1,2,4-triphosphane-1-thione
- L67 ANSWER 33 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Mechanism for desulfuration of sulfur-containing substances on Raney nickel and iron catalysts
- L67 ANSWER 34 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI High dose rate radiolysis of **hydrogen sulfide**. Sulfur as an electron scavenger

- L67 ANSWER 35 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Studies of sulfur in liquid **hydrogen sulfide** and sulfur dioxide and the use of **chlorosulfanes** in the study of elemental sulfur
- L67 ANSWER 36 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Thermal decomposition of tri- and **tetrasulfanes**
- L67 ANSWER 37 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Rapid method for determining sulfur in organic substances
- L67 ANSWER 38 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Thiolysis of **sulfuryl chloride**
- L67 ANSWER 39 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Ultramicro and trace analysis of organic substances. I. Determination of very small quantities of substances of low volatility based upon their contents of fluorine, sulfur, or phosphorus
- L67 ANSWER 40 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of sulfur compounds in sulfate turpentine
- L67 ANSWER 41 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Organic sulfur compounds in the kraft pulping process
- L67 ANSWER 42 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Acids of sulfur. V. Degradation of chainlike sulfur compounds
- L67 ANSWER 43 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Bond energies and the interactions between next-nearest neighbors. I. Saturated hydrocarbons, diamond, **sulfanes**, S8, and organic sulfur compounds
- L67 ANSWER 44 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Acids of sulfur. XVI. Iodometric and colorimetric determination of **sulfane**, elemental sulfur, and **sulfane-sulfur** mixtures
- L67 ANSWER 45 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI The chemistry of sulfur. XLVIII. The reaction of **sulfanes** with chloral
- L67 ANSWER 46 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Contributions to the chemistry of sulfur. XLIX. The homologous series of **cyanosulfanes**,  $\text{Sn}(\text{CN})_2$

L67 ANSWER 47 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XLVII. The molar heat of gaseous **disulfane** and the barrier potential of the inner rotation

L67 ANSWER 48 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XLIV. Enthalpies of vaporization, vapor pressures, boiling points, critical temperatures and pressures, and Trouton's constants of **sulfanes**

L67 ANSWER 49 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XXXIX. The viscosities of the **sulfanes**

L67 ANSWER 50 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XXXVI. The reaction of definite higher alkali sulfides with anhydrous formic acid

L67 ANSWER 51 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI The chemistry of sulfur. XXXIV. The molar volumes and molar refractivities of the **sulfanes** and their dependence on chain length

L67 ANSWER 52 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Sulfur. XXVII. Molecular distribution in the condensation reaction between **sulfanes** and **halosulfanes**

L67 ANSWER 53 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Semimicrodetermination of sulfur in cystine and methionine

L67 ANSWER 54 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Metabolite analogs. IV. Preparation of some sulfur-containing benzimidazoles with substituents on the 4(7)- and 6(5)-positions

L67 ANSWER 55 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XXII. The reaction between **sulfanes**  $H_2Sn$  and **chlorosulfanes**  $SmCl_2$

L67 ANSWER 56 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Chemistry of sulfur. XVI. The nomenclature of chaintype sulfur compounds

L67 ANSWER 57 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Semimicromethod for determining sulfur in organic compounds

L67 ANSWER 58 OF 67 HCA COPYRIGHT 2008 ACS on STN  
 TI Synthesis of physiologically active compounds labeled with sulfur35

L67 ANSWER 59 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Intermediary sulfur metabolism. II. Cystine-balance experiments with Escherichia coli

L67 ANSWER 60 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Some aspects of the action of sulfonamides. I. Binding of S35 labeled sulfanilamide by Escherichia coli

L67 ANSWER 61 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI The influence of small quantities of sulfur and cyanogen compounds on the velocity of oxidation of ferrous ions to ferric ions

L67 ANSWER 62 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Biguanide derivatives

L67 ANSWER 63 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Microdetermination of sulfur in organic molecules by the hydrogenation method. I. Microchemical determination of sulfur

L67 ANSWER 64 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfur studies. XVIII. Sulfonium derivatives of p-phenylphenacyl bromide

L67 ANSWER 65 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of sulfur in organic compounds by hydrogenation

L67 ANSWER 66 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI General method for determining sulfur in organic materials

L67 ANSWER 67 OF 67 HCA COPYRIGHT 2008 ACS on STN  
TI The determination of antimony in ores

=> D L67 55 BIB ABS HITSTR HITIND

L67 ANSWER 55 OF 67 HCA COPYRIGHT 2008 ACS on STN  
AN 50:27155 HCA Full-text  
OREF 50:5442e-g  
TI Chemistry of sulfur. XXII. The reaction between sulfanes H<sub>2</sub>Sn and chlorosulfanes SmCl<sub>2</sub>  
AU Feher, F.; Laue, W.; Kraemer, J.  
CS Univ. Cologne, Germany  
SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1955), 281, 151-60  
CODEN: ZAACAB; ISSN: 0044-2313  
DT Journal  
LA Unavailable

AB cf. C.A. 49, 12169i. The ds., refractive indexes, viscosities at 20°, and surface tensions at 20° are given for SnCl<sub>2</sub> with n = 1, 2, 3, 4, 5.1, 7.5, and 14.2. The samples with n > 2 were not exhaustively purified. The mol. vol., mol. refraction, and parachor for SnCl<sub>2</sub> with n = 1, 2, 3, and 4, have approx. const. increments through the series. This suggests that the S atoms are equiv. and supports the suggested chain structure.

IT 7704-34-9, Sulfur  
(chemistry of)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)

IT **Hydrogen sulfides**  
(reaction of H<sub>2</sub>S<sub>x</sub> with SmCl<sub>2</sub>)

IT 7704-34-9, Sulfur  
(chemistry of)

=> D L76 1-12 TI

L76 ANSWER 1 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI Production of insoluble sulfur or soluble sulfur and insoluble sulfur mixture and/or their mixtures with hydrocarbon oil

L76 ANSWER 2 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI A high capacity manganese-based sorbent for regenerative high temperature desulfurization with direct sulfur production. Conceptual process application to coal gas cleaning

L76 ANSWER 3 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI A catalyst based on titanium and method for its preparation

L76 ANSWER 4 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI Processing of municipal plastic wastes by gasification

L76 ANSWER 5 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI Process for removing sulfur compounds

L76 ANSWER 6 OF 12 HCA COPYRIGHT 2008 ACS on STN

TI Process for purifying high-temperature reducing gases and composite power plant with coal gasification

L76 ANSWER 7 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI Processing of sulfate-containing wastewater

L76 ANSWER 8 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI Manufacture of catalysts for the conversion of hydrogen sulfide and/or sulfur dioxide, the catalysts obtained, and their use

L76 ANSWER 9 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI Removal of the halides in desorbed gas in boiler flue gas dry desulfurization

L76 ANSWER 10 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI The Claus process: thermodynamics of sulphane production

L76 ANSWER 11 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI Iron chloride activated oxidation of sulfide ores

L76 ANSWER 12 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 TI Reduction of metal sulfides occurring in a refining process

=> D L76 1,5,10 BIB ABS HITSTR HITIND

L76 ANSWER 1 OF 12 HCA COPYRIGHT 2008 ACS on STN  
 AN 142:394502 HCA Full-text  
 TI Production of insoluble sulfur or soluble sulfur and insoluble sulfur mixture and/or their mixtures with hydrocarbon oil  
 IN Macho, Vendelin; Jurecek, Ludovit; Komora, Ladislav; Kavala, Miroslav; Jurecekova, Emilia; Vojdasova, Viera  
 PA VUP, A. S., Slovakia  
 SO Slovakia, 9 pp.  
 CODEN: SLXXFO  
 DT Patent  
 LA Slovak  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	SK 283885	B6	20040406	SK 1998-1366	19981001
					01
				<--	
PRAI	SK 1998-1366		19981001	<--	

AB Insol. S or a mixt. of sol. S and insol. S and/or their mixts. with hydrocarbon oils are produced by using oxidn.-redn. reactions of low-mol. S compds. (e.g., CS<sub>2</sub>, COS, H<sub>2</sub>S) in the Claus process. After the partial combustion of the low-mol. S compds. or their mixts. with org. compds., a reaction gas with the SO<sub>2</sub>/H<sub>2</sub>S mol. ratio of 1:(2-2.5) is cooled to -10 to +50° and led to an aq. or aq.-alc. medium. Insol. S is withdrawn, ground and/or ground and formulated with oil and/or sol. S and/or insol. S. In another option, the molten S from the Claus process is held ≥3 min at 200-300°, modified with 0.1-1.5 wt.% stabilizer, and quenched by contacting a cooled surface at -30 to +30° or by charging into an aq. and/or colloidal soln. at -10 to +40°. After drying, the product is disintegrated and/or selectively extd. to remove sol. S, dried, disintegrated, and packaged and/or formulated with hydrocarbon oil. The method is suitable for liquidation of H<sub>2</sub>S and other S compds. from hydrodesulfurization of petroleum fractions and residues. The insol. S is suitable as a vulcanization agent.

IT 7783-06-4, Hydrogen sulfide, reactions  
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7783-06-4 HCA

CN Hydrogen sulfide (H<sub>2</sub>S) (CA INDEX NAME)

H<sub>2</sub>S

IT 7647-01-0, Hydrochloric acid, uses  
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7647-01-0 HCA

CN Hydrochloric acid (CA INDEX NAME)

HCl

IT 7704-34-9F, Sulfur, preparation  
(prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S



IT 7782-50-5, Chlorine, uses  
(stabilizer in prodn. of insol. sulfur or sol. sulfur and insol.  
sulfur mixt. and/or their mixts. with hydrocarbon oil)  
RN 7782-50-5 HCA  
CN Chlorine (CA INDEX NAME)

Cl-Cl

IC ICM C01B017-02  
CC 49-1 (Industrial Inorganic Chemicals)  
Section cross-reference(s): 39, 51  
ST insol sulfur prodn Claus process  
IT 75-15-0, Carbon disulfide, reactions 463-58-1, Carbonyl sulfide  
7446-09-5, Sulfur dioxide, reactions 7783-06-4,  
Hydrogen sulfide, reactions  
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur  
mixt. and/or their mixts. with hydrocarbon oil)  
IT 56-81-5, Glycerol, uses 57-55-6, Propylene glycol, uses 64-17-5,  
Ethanol, uses 64-18-6, Formic acid, uses 64-19-7, Acetic acid,  
uses 107-21-1, Ethylene glycol, uses 111-46-6, Diethylene  
glycol, uses 7647-01-0, Hydrochloric  
acid, uses 7664-38-2, Phosphoric acid, uses 7664-93-9,  
Sulfuric acid, uses 7782-99-2, Sulfurous acid, uses 9002-89-5,  
Polyvinyl alcohol 9004-34-6D, Cellulose, ether 25265-71-8,  
Dipropylene glycol 25322-68-3, Polyethylene glycol  
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur  
mixt. and/or their mixts. with hydrocarbon oil)  
IT 7704-34-9F, Sulfur, preparation  
(prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt.  
and/or their mixts. with hydrocarbon oil)  
IT 57-11-4, Stearic acid, uses 7553-56-2, Iodine, uses 7726-95-6,  
Bromine, uses 7782-50-5, Chlorine, uses 7791-25-5,  
Sulfuryl chloride (SO2Cl2)  
(stabilizer in prodn. of insol. sulfur or sol. sulfur and insol.  
sulfur mixt. and/or their mixts. with hydrocarbon oil)

L76 ANSWER 5 OF 12 HCA COPYRIGHT 2008 ACS on STN  
AN 119:209535 HCA Full-text  
OREF 119:37211a,37214a  
TI Process for removing sulfur compounds  
IN Lowery, Richard E.; Engelbert, Donald R.

PA Phillips Petroleum Co., USA  
SO U.S., 10 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5219542	A	19930615	US 1991-727780	199107 10

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PRAI US 1991-727780 19910710 <--

AB S compds. including H<sub>2</sub>S, SO<sub>2</sub>, COS, and CS<sub>2</sub> are removed from S contaminated fluid streams using an absorption compn. contg. 60-90 ZnO, 10-30 zinc phosphate, and .ltorsim.30% by wt. alumina. The absorption compn. also contains an acid selected from the group consisting of HNO<sub>3</sub>, AcOH, H<sub>2</sub>SO<sub>4</sub>, and HCl. The process is suitable for the recovery of S from a Claus plant effluent.

IT 7647-01-0, Hydrochloric acid, uses  
(absorbent contg., for sulfur compd. removal from contaminated fluid streams)

RN 7647-01-0 HCA

CN Hydrochloric acid (CA INDEX NAME)

HCl

IT 7704-34-9D, Sulfur, compds. 7783-06-4,  
Hydrogen sulfide (H<sub>2</sub>S), miscellaneous  
(removal of, from contaminated fluid streams, by absorption, with zinc oxide and zinc phosphate and alumina contg. compn.)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

RN 7783-06-4 HCA

CN Hydrogen sulfide (H<sub>2</sub>S) (CA INDEX NAME)

H<sub>2</sub>S

IC ICM C01B017-16  
ICS C01B031-20; C01B017-20; B01J008-00  
INCL 423230000  
CC 59-4 (Air Pollution and Industrial Hygiene)  
Section cross-reference(s): 49  
IT 10103-46-5, Calcium phosphate 64-19-7, Acetic acid, uses  
7647-01-0, Hydrochloric acid, uses  
7664-93-9, Sulfuric acid, uses 7697-37-2, Nitric acid, uses  
(absorbent contg., for sulfur compd. removal from contaminated  
fluid streams)  
IT 75-15-0, Carbon sulfide (CS<sub>2</sub>), miscellaneous 463-58-1, Carbonyl  
sulfide 7446-09-5, Sulfur dioxide, miscellaneous  
7704-34-9D, Sulfur, compds. 7783-06-4,  
Hydrogen sulfide (H<sub>2</sub>S), miscellaneous  
(removal of, from contaminated fluid streams, by absorption, with  
zinc oxide and zinc phosphate and alumina contg. compn.)  
L76 ANSWER 10 OF 12 HCA COPYRIGHT 2008 ACS on STN  
AN 88:24975 HCA Full-text  
OREF 88:3999a,4002a  
TI The Claus process: thermodynamics of **sulphane**  
production  
AU Kerr, Richard K.; Berlie, E. M.  
CS West. Res. and Dev. Ltd., Calgary, AB, Can.  
SO Energy Processing/Canada (1977), 69(6), 48-51  
CODEN: EPCADS; ISSN: 0319-5759  
DT Journal  
LA English  
AB The thermodyn. are discussed of **sulfane** (H<sub>2</sub>S<sub>x</sub>) formation in Claus  
plants for reaction furnaces, catalytic converters, and S condensers.  
Equil. formation of H<sub>2</sub>S<sub>x</sub> in the system followed by its dissoln. in  
condensed S downstream is sufficient to account for concns. of  
≤14,000 ppm H<sub>2</sub>S<sub>x</sub> dissolved in S.  
IT 7704-34-9P, preparation  
(manuf. of, thermodyn. of **sulfane** formation in)  
RN 7704-34-9 HCA  
CN Sulfur (CA INDEX NAME)

S

CC 49-1 (Industrial Inorganic Chemicals)  
Section cross-reference(s): 69  
ST sulfane formation Claus process  
IT 50864-71-6P  
(formation of, thermodyn. of, in Claus process)  
IT 7704-34-9P, preparation  
(manuf. of, thermodyn. of sulfane formation in)

=> D L82 1-18 TI

L82 ANSWER 1 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Effectiveness of natural treatment in a wastewater irrigation district of the Mexico City region: a synoptic field survey.  
[Erratum to document cited in CA132:112301]

L82 ANSWER 2 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Effectiveness of natural treatment in a wastewater irrigation district of the Mexico City region: a synoptic field survey

L82 ANSWER 3 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Gasification as an alternative method for the destruction of sulfur containing waste (ChemChar process)

L82 ANSWER 4 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Sulchem process for treatment of chemical weapons-related wastes

L82 ANSWER 5 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of organically bound sulfur in waste samples

L82 ANSWER 6 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Oxygen bomb combustion ion chromatography for elemental analysis of heteroatoms in fuel and wastes development

L82 ANSWER 7 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Methodology for selecting substances for the National Exposure Registry

L82 ANSWER 8 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Pesticide chemicals manufacturing category effluent limitations guidelines, pretreatment standards, and new source performance standards

L82 ANSWER 9 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Determination of the content of noxious oxides in cement industry

waste gases

- L82 ANSWER 10 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Development of a thermal stability-based ranking of hazardous organic compound incinerability
- L82 ANSWER 11 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Odorant for generator gas
- L82 ANSWER 12 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Purification of wastewater from thiokol production
- L82 ANSWER 13 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Recovery of sulfuric acid in waste acid
- L82 ANSWER 14 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Preparation of commercially important organic sulfur compounds from pulp industry waste products
- L82 ANSWER 15 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Colorimetric determination of hydrogen sulfide and methanethiol in industrial effluents
- L82 ANSWER 16 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Improvement of methods of collecting sulfate turpentines and Sulfan
- L82 ANSWER 17 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Removing and recovering sulfur dioxide from waste gases
- L82 ANSWER 18 OF 18 HCA COPYRIGHT 2008 ACS on STN  
TI Sulfur determination in sulfite waste liquor and organic compounds. Potassium permanganate method